AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claim 1 (Currently Amended): A computer system provided to operate in multiple operation modes, comprising:

a storage device having a first disk partition and a second disk partition, in which the first disk partition stores a first operating system to enable the computer system to boot and run in a first operation mode, and the second disk partition stores a second operating system to enable the computer system to boot and run in a sub-mode of a second operation mode; and

a mode controller having a status indicating an operation mode of the computer system,

wherein the storage device further comprises a master boot program to detect the status of the mode controller, hide the second disk partition, boot the computer system from the first disk partition, load the first operating system therein, and thereby enable the computer system to run in the first operation mode if the status of the mode controller indicates the first operation mode, and activate the second disk partition, boot the computer system from the second disk partition, load the second operating system therein, and thereby enable the computer system to run in a selected sub-mode of the second operation mode if the status of the mode controller indicates the selected sub-mode of the second operation mode, and

a monitor program to be executed if the computer system runs in the selected sub-mode of the second operation mode, in which the monitor program executes a first application specific to the selected sub-mode of the second operation mode, detects the status of the mode controller, and stops the first application and executes a second application specific to another sub-mode of the second operation mode if the status of the mode controller changes to the another sub-mode of the second operation mode.

Claim 2 (Original): The computer system as claimed in claim 1 wherein the master boot program further sets the memory size of a BIOS data area in the storage device to a predetermined value if the computer system runs in the selected sub-mode of the second operation mode.

Claim 3 (Original): The computer system as claimed in claim 2 wherein the master boot program further purifies an operating environment of the second operating system if the computer system runs in the selected sub-mode of the second operation mode.

Claim 4 (Original): The computer system as claimed in claim 3 wherein the master boot program purifies the operating environment of the second operating system by limiting the use of keyboard and mouse of the computer system, and disabling PNP (Plug and Play) functions of the computer system.

Claim 5 (Canceled)

Claim 6 (Currently Amended): The computer system as claimed in claim ~~5~~ 1 wherein if the status of the mode controller changes to the first operation mode, the monitor program further stops the first application, enables the computer system to enter a hibernation state, and reboots the computer system, and wherein if the computer system is turned off, the monitor program further stops the first application and enables the computer system to enter a hibernation state.

Claim 7 (Currently Amended): The computer system as claimed in claim ~~5~~ 1 further comprising an additional microprocessor to detect the status of the mode controller, and the monitor program detects the status of the mode controller via the additional microprocessor and an input/output interface.

Claim 8 (Original): The computer system as claimed in claim 7 wherein the input/output interface is a serial communication port or a GPIO (General Purpose Input Output) interface.

Claim 9 (Original): The computer system as claimed in claim 7 further comprising an LCD module being controlled by the microprocessor to display the operation mode of the computer system.

Claim 10 (Original): The computer system as claimed in claim 7 further comprising a receiver coupled with the monitor program via an input/output interface to receive a signal from a remote controller, so as to enable the monitor program to execute the first application according to the signal.

Claim 11 (Original): The computer system as claimed in claim 1 wherein the computer system further executes a resident program if the computer system runs in the first operating mode, in which the resident program detects the status of the mode controller, displays a confirmation window if the status of the mode controller changes to a sub-mode of the second operating mode, and reboots the computer system if a confirmation signal is received via the confirmation window.

Claim 12 (Original): The computer system as claimed in claim 1 wherein the sub modes of the second operation mode include music playing mode, a video playing mode, a TV broadcasting mode, a radio receiving mode, and a photo exploring mode.

Claim 13 (Original): The computer system as claimed in claim 12 wherein the mode controller is constructed as a manual control on the computer system.

Claim 14 (Currently Amended): A method for operating a computer system in multiple modes, comprising the steps of:

providing a storage device having a first disk partition and a second disk partition in the computer system, in which the first disk partition stores a first operating system and the second disk partition stores a second operating system;

providing a mode controller having at least one status indicating an operation mode of the computer system;

checking the status of the mode controller by a master boot program;

if the status of the mode controller indicates that the operation mode of the computer system is a first operation mode, hiding the second disk partition, booting the computer system from the first disk partition, loading the first operating system therein, thereby enabling the computer system to run in the first operation mode;~~and~~

if the status of the mode controller indicates that the operation mode of the computer system is a sub-mode of a second operation mode, activating the second disk partition, booting the computer system from the second disk partition, loading the second operating system therein, thereby enabling the computer system to run in the sub-mode of the second operation mode; and

if the computer system runs in the sub-mode of the second operation mode, executing a monitor program, in which the monitor program executes a first application specific to the sub-mode of the second operation mode, detects the status of the mode controller, and stops the first application and executes a second application specific to another sub-mode of the second operation mode if the status of the mode controller changes to the another sub-mode of the second operation mode.

Claim 15 (Original): The method as claimed in claim 14 further comprising setting the memory size of a BIOS data area in the computer system to a predetermined value by the master boot program if the computer system runs in the sub-mode of the second operation mode.

Claim 16 (Original): The method as claimed in claim 15 further comprising purifying an operating environment of the second operating system by the master boot program if the computer system runs in the sub-mode of the second operation mode.

Claim 17 (Original): The method as claimed in claim 16 wherein the step of purifying the operating environment of the second operating system comprises limiting the use of keyboard and mouse of the computer system, and disabling PNP (Plug and Play) functions of the computer system.

Claim 18 (Canceled)

Claim 19 (Currently Amended): The method as claimed in claim ~~18~~ 14 wherein if the status of the mode controller changes to the first operation mode, the monitor program further stops the first application, enables the computer system to enter a hibernation state, and reboots the computer system.

Claim 20 (Original): The method as claimed in claim 19 wherein if the computer system is turned off, the monitor program further stops the first application and enables the computer system to enter a hibernation state.

Claim 21 (Original): The method as claimed in claim 19 further comprising providing an additional microprocessor to detect the status of the mode controller, the monitor program detects the status of the mode controller via the additional microprocessor and an input/output interface.

Claim 22 (Original): The method as claimed in claim 21 further comprising providing an LCD module being controlled by the microprocessor to display the operation mode of the computer system.

Claim 23 (Original): The method as claimed in claim 21 further comprising providing a receiver coupled to the monitor program via an input/output interface to receive a signal from a remote controller, and the monitor program operates the first application according to the signal.

Claim 24 (Original): The method as claimed in claim 14 further comprising executing a resident program if the computer system runs in the first operation mode, in which the resident program detects the status of the mode controller, displays a confirmation window if the status changes to a sub-mode of the second mode, and reboots the computer system if a confirmation signal is received via the confirmation window.

Claim 25 (Original): The method as claimed in claim 14 wherein the sub-modes of the second operation mode include a music playing mode, a video playing mode, a TV broadcasting mode, a radio receiving mode, and a photo exploring mode.

Claim 26 (Original): The method as claimed in claim 25 wherein the mode controller is constructed as a manual control on the computer system.